



**City of California City  
Building Department  
21000 Hacienda Blvd  
California City, CA 93505**

**Commercial Solar Systems Information**

To obtain a Permit for a residential Solar System, do the following;

1. Fill out a Commercial Electrical Building Permit Application, located on our Website or at the Building Department.
2. We will need one set of plans on a minimum of 11" X 17" size paper via e-mail at [jbarragan@californiacity-ca.gov](mailto:jbarragan@californiacity-ca.gov) or if submitting in person we will need **two sets** of plans on a minimum of 11" X 17" size papers.
3. There must be 4' Fire Clearance pathway on roof mounted solar system.
4. Arrays shall be limited to 150 feet measured along either axis.
5. There must be an 8' clear pathway between arrays.
6. Wind speed must be calculated at a minimum of 130 MPH on the structural calculations.
7. We need the following notes or information on the electrical plans:
  - a. The size of the Main Breaker on the existing Meter Panel
  - b. The type of grounding system (ufer, rod, etc.)
  - c. The size of the existing grounding electrode conductor
  - d. Note stating the existing ground system will be replaced with a new system if existing grounding system is not up to current codes.
  - e. Whether the service wires from the utility are overhead feed or an underground feed
  - f. Locations of main service or utility disconnect
  - g. Total number of modules, number of modules per string and the total number of strings
  - h. Make and model of inverter(s) and/or combiner box if used
  - i. One-line diagram of system
  - j. Specify grounding/bonding, conductor type and size, conduit type and size and number of conductors in each section of conduit
  - k. If batteries are to be installed, include them in the diagram and show their locations and venting
  - l. Equipment cut sheets including inverters, modules, AC and DC disconnects, combiners and wind generators
  - m. Labeling of equipment as required by CEC, Sections 690 and 705
  - n. Site diagram showing the arrangement of panels on the roof or ground, north arrow, lot dimensions and the distance from property lines to adjacent buildings/structures (existing and proposed)

- o. All work will meet 2016 California Electrical Codes
- 8. A roof plan showing roof layout, PV panels and the following fire safety items: approximate location of roof access point, location of code-compliant access pathways, PV system fire classification and the locations of all required labels and markings. Examples of clear path access pathways are available in the State Fire Marshal Solar PV Installation Guide.  
<http://osfm.fire.ca.gov/pdf/reports/solarphotovoltaicguideline.pdf>.
- 9. Plan Review
  - a. Permit applications can be submitted to Tiffany Carter in person at 21000 Hacienda Blvd; California City or to Joe Barragan at [jbarragan@californiacity-ca.gov](mailto:jbarragan@californiacity-ca.gov).
- 10. Once the permit to construct the solar installation has been issued and the system has been installed, it must be inspected before final approval is granted for the solar system. On-site inspections can be scheduled by contacting the Building Department by telephone at (760) 373-7162 or electronically at [jbarragan@californiacity-ca.gov](mailto:jbarragan@californiacity-ca.gov). Inspection requests received within business hours are typically scheduled for the next business day. If next business day is not available, inspection should happen within a five-day window. Permit holders must be prepared to show conformance with all technical requirements in the field at the time of inspection. The inspector will verify that the installation is in conformance with applicable code requirements and with the approved plans.  
THERE WILL BE ONE INSPECTION WHICH WILL INCLUDE:
  - a. Number of PV modules and model number match plans and specification sheets number match plans and specification sheets.
  - b. PV mounting bases, stanchions, roof flashings, rails, roof shingle/roof tile penetrations, conductor type and sizing, conduit runs, combiner boxes, rough electrical components.
  - c. Provide a ladder for Building Inspector's use. Structural calculations (where applicable) to be on site and available for the Building Inspector.
  - d. Verifying conductor size/conductor type, grounding and bonding components, transfer switches, combiner boxes, through-roof penetrations, panel boards, disconnects and warning labels.
  - e. Sealants, caulking products need to be listed and approved for the application.
  - f. Electrical boxes are accessible and connections are suitable for environment.
  - g. Contractor shall have the product cut sheets, caulking & sealant product available for the Building Inspector.
  - h. Appropriate signs are properly constructed, installed and displayed, including the following.
    - Sign identifying PV power source system attributes at DC disconnect

- Sign identifying AC point of connection
- Sign identifying switch for alternative power system
- i. Equipment ratings are consistent with application and installed signs on the installation, including the following.
  - Inverter has a rating as high as max voltage on PV power source sign.
  - DC-side overcurrent circuit protection devices (OCPDs) are DC rated at least as high as max voltage on sign.
  - Switches and OCPDs are installed according to the manufacturer's specifications (i.e., many 600VDC switches require passing through the switch poles twice in a specific way).
  - Inverter is rated for the site AC voltage supplied and shown on the AC point of connection sign.
  - OCPD connected to the AC output of the inverter is rated at least 125% of maximum current on sign and is no larger than the maximum OCPD on the inverter listing label.
  - Sum of the main OCPD and the inverter OCPD is rated for not more than 120% of the bus bar rating.

11. For additional information or for same day inspections; inspections request must be called in prior to 7am, contact Joe Barragan at (760) 373-7162.

Joe Barragan  
Building Official for California City  
Office (760) 373-7162  
Fax (760) 373-7532  
Email address: [jbarragan@californiacity-ca.gov](mailto:jbarragan@californiacity-ca.gov)